MAP 3

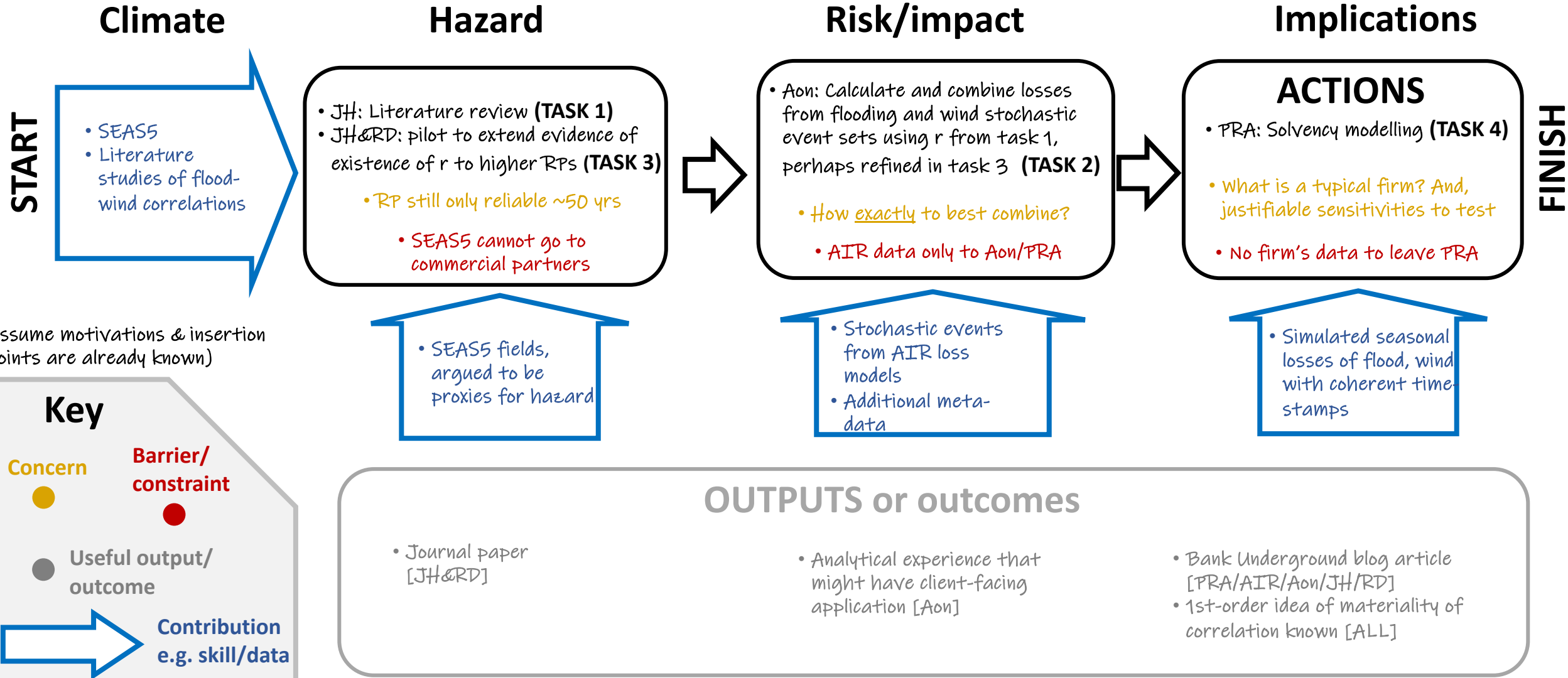# PROJECT PLANNER: *UK flood-wind correlation* (is it potentially material?)

It is not proportionate or feasible to fully and self-consistently create and run a new catastrophe model, and then to assess the implications of it (e.g. impact on 100 yr AEP loss estimates, and then solvency). However, separate flooding and extreme wind models exist (AIR), as does software to combine results with a given correlation (Aon), and expertise to assess solvency (PRA). The challenge is to link climate evidence to solvency with sufficient accuracy to allow certain, focussed inferences.

Climate   ## Hazard   ## Risk/impact   ## Implications

START

- SEAS5
- Literature studies of flood-wind correlations

Hazard box:
- JH: Literature review **(TASK 1)**
- JH&RD: pilot to extend evidence of existence of r to higher RPs **(TASK 3)**
  - RP still only reliable ~50 yrs
  - SEAS5 cannot go to commercial partners

Risk/impact box:
- Aon: Calculate and combine losses from flooding and wind stochastic event sets using r from task 1, perhaps refined in task 3 **(TASK 2)**
  - How <u>exactly</u> to best combine?
  - AIR data only to Aon/PRA

Implications box:

ACTIONS
- PRA: Solvency modelling **(TASK 4)**
- What is a typical firm? And, justifiable sensitivities to test
- No firm's data to leave PRA

FINISH

Assume motivations & insertion points are already known)

- SEAS5 fields, argued to be proxies for hazard

- Stochastic events from AIR loss models
- Additional meta-data

- Simulated seasonal losses of flood, wind with coherent time-stamps

Key

- **Concern** ● (yellow)
- **Barrier/constraint** ● (red)
- ● **Useful output/outcome**
- ⇒ **Contribution** e.g. skill/data

OUTPUTS or outcomes

- Journal paper [JH&RD]

- Analytical experience that might have client-facing application [Aon]

- Bank Underground blog article [PRA/AIR/Aon/JH/RD]
- 1st-order idea of materiality of correlation known [ALL]